

IN THE CLAIMS:

Please cancel claims 1-52, without prejudice, and add new claims 53-104 as follows.

Claims 1-52. (Cancelled).

53. (New) Method of adjusting mobility management in a mobile communication network, said mobile communication network comprising

a mobility control unit adapted to track location of communication units communicating in said mobile communication network and to control the mobility management for said communication units,

said method comprising the steps of

providing said mobility control unit with mobility information related to a communication unit,

evaluating the degree of mobility of said communication unit from said mobility information related to said communication unit, and,

when said step of evaluating indicates the immobility of said communication unit, adjusting, by said mobility control unit, values of timer elements of said communication unit and said mobility control unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit.

54. (New) Method according to claim 53, wherein said mobility information related to said communication unit includes a specific information element indicating a

periodic update timer value and/or predefined mobility management parameter for mobility management elements of said communication unit and/or said mobility control unit, said periodic update timer value and/or predefined mobility management parameter being detected in said evaluating step.

55. (New) Method according to claim 53, wherein said mobility information related to said communication unit includes previous location information and current location information of said communication unit, said previous location information and current location information being compared in said evaluating step to determine whether they are equal.

56. (New) Method according to claim 53, wherein said adjusting step comprises a step (S80) of setting said timer elements of said communication unit and/or said mobility control unit to predefined changed periodic update timer values and/or predefined changed mobility management parameters.

57. (New) Method according to claim 53, further comprising a step of disabling a function of the mobile communication network which is used to force a modification of an operation state of the communication unit.

58. (New) Method according to claim 53, wherein said communication unit is employed in a static device used for a M2M application.

59. (New) Method according to claim 53, wherein said mobility control unit is included in a core network control unit of the mobile communication network.

60. (New) Method according to claim 53, wherein said mobility information related to said communication unit is provided from said communication unit.

61. (New) Method according to claim 53, wherein said mobility information related to said communication unit is provided from a core network control unit of the mobile communication network.

62. (New) Method according to claim 60, wherein said mobility information includes a request for setting at least one timer element to a maximum value.

63. (New) Method according to claim 60, wherein said mobility information includes a request for deactivating at least one timer element.

64. (New) Method according to claim 53, wherein in said adjusting step the timer elements are set to maximum settable values.

65. (New) Method according to claim 53, wherein in said adjusting step the timer elements are deactivated.

66. (New) Method according to claim 53, wherein in said adjusting step the timer elements are set to values which are incremented by a predetermined amount in comparison to the values set before.

67. (New) Mobility control unit in a mobile communication network, said mobility control unit being adapted to track location of communication units communicating in said mobile communication network and to control the mobility management for said communication units,

said mobility control unit comprising

means adapted to receive mobility information related to a communication unit,

means adapted to evaluate the degree of mobility of said communication unit from said mobility information related to said communication unit, and

means adapted to adjust, when said means adapted to evaluate indicates the immobility of said communication unit, values of timer elements of said communication unit and said mobility control unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit.

68. (New) Mobility control unit according to claim 67, wherein said received mobility information related to said communication unit includes a specific information element indicating a periodic update timer value and/or predefined mobility management parameter for mobility management elements of said communication unit and/or said mobility control unit, wherein said means adapted to evaluate the degree of mobility of said communication unit detects said periodic update timer value and/or predefined mobility management parameter.

69. (New) Mobility control unit according to claim 67, wherein said received mobility information related to said communication unit includes previous location information and current location information of said communication unit, wherein said means adapted to evaluate the degree of mobility of said communication unit compares said previous location information and current location information to determine whether they are equal.

70. (New) Mobility control unit according to claim 67, wherein said means adapted to adjust said timer elements sets said timer elements of said communication unit

and/or said mobility control unit to predefined changed periodic update timer values and/or predefined changed mobility management parameters.

71. (New) Mobility control unit according to claim 67, wherein said mobility control unit is further adapted to disable a function of the mobile communication network which is used to force a modification of an operation state of the communication unit.

72. (New) Mobility control unit according to claim 67, wherein said communication unit is employed in a static device used for a M2M application.

73. (New) Mobility control unit according to claim 67, wherein said mobility control unit is included in a core network control unit of the mobile communication network.

74. (New) Mobility control unit according to claim 67, wherein said mobility information related to said communication unit is received from said communication unit.

75. (New) Mobility control unit according to claim 67, wherein said mobility information related to said communication unit is provided from a core network control unit of the mobile communication network.

76. (New) Mobility control unit according to claim 74, wherein said mobility information includes a request for setting at least one timer element to a maximum value.

77. (New) Mobility control unit according to claim 74, wherein said mobility information includes a request for deactivating at least one timer element.

78. (New) Mobility control unit according to claim 67, wherein said means adapted to adjust the timer elements sets the timer elements to maximum settable values.

79. (New) Mobility control unit according to claim 67, wherein said means adapted to adjust the timer elements deactivates the timer elements.

80. (New) Mobility control unit according to claim 67, wherein said means adapted to adjust the timer elements sets the timer elements to values which are incremented by a predetermined amount in comparison to the values set before.

81. (New) Communication unit used in connection with a mobile communication network, said mobile communication network comprising a mobility control unit adapted to track location of communication units communicating in said mobile communication network and to control the mobility management for said communication units,

said communication unit is adapted

to send mobility information related to said communication unit, said mobility information being usable by said mobility control unit to evaluate the degree of mobility of said communication unit, and

to set values of timer elements of said communication unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit, on the basis of predefined changed periodic update timer values and/or predefined changed mobility management parameters received from said mobility control unit in response to the sending of said mobility information.

82. (New) Communication unit according to claim 81, wherein said mobility information related to said communication unit includes a specific information element

indicating a periodic update timer value and/or predefined mobility management parameter for mobility management elements of said communication unit and/or said mobility control unit.

83. (New) Communication unit according to claim 81, said communication unit is employed in a static device used for a M2M application.

84. (New) Communication unit according to claim 81, wherein said mobility information includes a request for setting at least one timer element to a maximum value.

85. (New) Communication unit according to claim 81, wherein said mobility information includes a request for deactivating at least one timer element.

86. (New) Mobility management adjustment system used in a mobile communication network, said mobility management adjustment system comprises:

a communication unit; and

a mobility control unit, said mobility control unit being adapted to track location of communication units communicating in said mobile communication network and to control the mobility management for said communication units,

said mobility control unit comprising

means adapted to receive mobility information related to a communication unit,

means adapted to evaluate the degree of mobility of said communication unit from said mobility information related to said communication unit, and

means adapted to adjust, when said means adapted to evaluate indicates the immobility of said communication unit, values of timer elements of said communication unit and said mobility control unit to a maximum timer value or a timer value being

higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit.

87. (New) Mobility management adjustment system according to claim 86, wherein said received mobility information related to said communication unit includes a specific information element indicating a periodic update timer value and/or predefined mobility management parameter for mobility management elements of said communication unit and/or said mobility control unit, wherein said means adapted to evaluate the degree of mobility of said communication unit detects said periodic update timer value and/or predefined mobility management parameter.

88. (New) Mobility management adjustment system according to claim 86, wherein said received mobility information related to said communication unit includes previous location information and current location information of said communication unit, wherein said means adapted to evaluate the degree of mobility of said communication unit compares said previous location information and current location information to determine whether they are equal.

89. (New) Mobility management adjustment system according to claim 86, wherein said means adapted to adjust said timer elements sets said timer elements of said communication unit and/or said mobility control unit to predefined changed periodic update timer values and/or predefined changed mobility management parameters.

90. (New) Mobility management adjustment system according to claim 86, wherein said mobility control unit is further adapted to disable a function of the mobile

communication network which is used to force a modification of an operation state of the communication unit.

91. (New) Mobility management adjustment system according to claim 86, wherein said communication unit is employed in a static device used for a M2M application.

92. (New) Mobility management adjustment system according to claim 86, wherein said mobility control unit is included in a core network control unit of the mobile communication network.

93. (New) Mobility management adjustment system according to claim 86, wherein said mobility information related to said communication unit is received from said communication unit.

94. (New) Mobility management adjustment system according to claim 86, wherein said mobility information related to said communication unit is provided from a core network control unit of the mobile communication network.

95. (New) Mobility management adjustment system according to claim 93, wherein said mobility information includes a request for setting at least one timer element to a maximum value.

96. (New) Mobility management adjustment system according to claim 93, wherein said mobility information includes a request for deactivating at least one timer element.

97. 9New) Mobility management adjustment system according to claim 86, wherein said means adapted to adjust the timer elements sets the timer elements to maximum settable values.

98. (New) Mobility management adjustment system according to claim 86, wherein said means adapted to adjust the timer elements deactivates the timer elements.

99. (New) Mobility control unit according to claim 86, wherein said means adapted to adjust the timer elements sets the timer elements to values which are incremented by a predetermined amount in comparison to the values set before.

100. (New) Mobility management adjustment system according to claim 86, wherein said communication unit is adapted

to send mobility information related to said communication unit, said mobility information being usable by said mobility control unit to evaluate the degree of mobility of said communication unit, and

to set values of timer elements of said communication unit to a maximum timer value or a timer value being higher than a default timer value of said mobile communication network, said timer elements defining a time period of a ready state of said communication unit and/or a time period for performing a location update for said communication unit, on the basis of predefined changed periodic update timer values and/or predefined changed mobility management parameters received from said mobility control unit in response to the sending of said mobility information.

101. (New) Mobility management adjustment system according to claim 100, wherein said mobility information related to said communication unit includes a specific

information element indicating a periodic update timer value and/or predefined mobility management parameter for mobility management elements of said communication unit and/or said mobility control unit.

102. (New) Mobility management adjustment system according to claim 100, said communication unit is employed in a static device used for a M2M application.

103. (New) Mobility management adjustment system according to claim 100, wherein said mobility information includes a request for setting at least one timer element to a maximum value.

104. (New) Mobility management adjustment system according to claim 100, wherein said mobility information includes a request for deactivating at least one timer element.